

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A method of producing low-temperature coke, in which granular coal is heated to a temperature of 700 to 1050°C in a fluidized-bed reactor ~~[[2]]~~ by ~~means of~~ an oxygen-containing gas, ~~characterized in that~~ comprising introducing from below a first gas or gas mixture ~~is introduced from below~~ through at least one gas supply tube ~~[[3]]~~ into a mixing chamber ~~region (8)~~ of the fluidized-bed reactor ~~[[2]]~~, the at least one gas supply tube ~~[[3]]~~ being at least partly surrounded by a stationary annular fluidized bed ~~[[6]]~~ which is fluidized by supplying fluidizing gas, and ~~that the~~ adjusting gas velocities of the first gas or gas mixture and of the fluidizing gas for the stationary annular fluidized bed ~~(6)~~ ~~are adjusted such that the~~ wherein the gas velocities have a Particle-Froude-Number~~[[s]]~~ in the at least one gas supply tube ~~[[3)]~~ are]] between 1 and 100, in the stationary annular fluidized bed ~~[[6]]~~ between 0.02 and 2, and in the mixing chamber ~~[[8]]~~ between 0.3 and 30.

2. (Currently Amended) The method as claimed in claim 1, ~~characterized in that~~ wherein the Particle-Froude-Number in the at least one gas supply tube ~~[[3]]~~ is between 1.15 and 20.

3. (Currently Amended) The method as claimed in claim 1 ~~or 2~~, ~~characterized in that~~ wherein the Particle-Froude-Number in the stationary annular fluidized bed ~~[[6]]~~ is between 0.115 and 1.15.

4. (Currently Amended) The method as claimed in ~~any of the preceding claims, characterized in that~~ claim 1, wherein the Particle-Froude-Number in the mixing chamber ~~[[8]]~~ is between 0.37 and 3.7.

5. (Currently Amended) The method as claimed in ~~any of the preceding claims, characterized in that~~ claim 1, wherein solids are discharged from the fluidized-bed reactor and separated in a separator, wherein part of the solids or an amount of a product stream discharged from the reactor (2) and separated in a separator (10) are recirculated to the stationary annular fluidized bed [(6)].

6. (Currently Amended) The method as claimed in claim 5, ~~characterized in that~~ wherein the amount of the product stream recirculated to the stationary annular fluidized bed [(6)] is controlled by a in-dependence on the pressure difference in pressure above the mixing chamber [(8)].

7. (Currently Amended) The method as claimed in ~~any of the preceding claims, characterized in that~~ claim 1, wherein the granular coal [[with]]having a grain size of less than 10 mm is supplied to the fluidized-bed reactor (2) as a starting material.

8. (Currently Amended) The method as claimed in ~~any of the preceding claims, characterized in that~~ claim 1, wherein the granular coal is a highly volatile coal and the highly volatile coal is supplied to the fluidized-bed reactor [(2)] as starting material.

9. (Currently Amended) The method as claimed in ~~any of the preceding claims, characterized in that~~ claim 1, wherein the fluidizing gas air is supplied to the fluidized-bed reactor is air (2) as fluidizing gas.

10. (Currently Amended) The method as claimed in ~~any of the preceding claims, characterized in that the~~ claim 1, wherein pressure in the fluidized-bed reactor [(2)] is between 0.8 and 10 bar.

11. (Currently Amended) The method as claimed in ~~any of the preceding claims, characterized in that~~ claim 1, wherein iron ore is additionally supplied to the fluidized-bed reactor ~~[(2)]~~.

12. (Currently Amended) The method as claimed in claim 11, ~~characterized in that~~ wherein the iron ore is preheated before being supplied to the fluidized-bed reactor ~~[(2)]~~.

13. (Currently Amended) The method as claimed in ~~any of claims 10 to 12, characterized in that~~ claim 10, wherein ~~from the reactor (2)~~ a product of iron ore and low-temperature coke is withdrawn from the fluidized-bed reactor, which wherein the product has a weight ratio of iron to carbon of 1:1 to 2:1.

14. (Currently Amended) A plant for producing low-temperature coke, ~~in particular for performing a by the method as claimed in any of claims 1 to 13, claim 1,~~ comprising a fluidized-bed reactor ~~(2) which constitutes a fluidized-bed reactor,~~ ~~characterized in that~~ wherein the fluidized-bed reactor ~~[(2)]~~ has a gas supply system which is formed such that gas flowing through the gas supply system entrains solids from a stationary annular fluidized bed ~~[(6)]~~, which at least partly surrounds the gas supply system, into the mixing chamber ~~[(8)]~~.

15. (Currently Amended) The plant as claimed in claim 14, ~~characterized in that~~ wherein the gas supply system has at least one gas supply tube ~~[(3)]~~ which in the lower region of the fluidized-bed reactor ~~[(2)]~~ extends upwards substantially vertically into the mixing chamber ~~[(8)]~~ of the fluidized-bed reactor ~~[(2)]~~, the at least one gas supply tube ~~[(3)]~~ being surrounded by a chamber which at least partly annularly extends around the at least one gas supply tube ~~(3)~~ and in which the stationary annular fluidized bed ~~(6)~~ is formed.

16. (Currently Amended) The plant as claimed in claim 15, ~~characterized in that~~ wherein the at least one gas supply tube ~~[(3)]~~ is arranged

approximately centrally ~~based on~~ with reference to the cross-sectional area of the fluidized-bed reactor [(2)].

17. (Currently Amended) The plant as claimed in ~~any of claims 14 to 16, characterized in that~~ claim 14, wherein downstream of the fluidized-bed reactor (2) there is provided a separator [(10)] for separating solids, which ~~preferably~~ has a solids return conduit [(11a)] leading to the annular fluidized bed [(6)] of the fluidized-bed reactor [(2)].

18. (Currently Amended) The plant as claimed in ~~any of claims 14 to 17, characterized in that~~ claim 14, wherein in the annular chamber [(4)] of the fluidized-bed reactor, [(2)] a gas distributor [(5)] is provided, which divides the annular chamber [(4)] into an upper fluidized bed region [(6)] and a lower gas distributor chamber, and that the gas distributor chamber is connected with a supply conduit [(7)] for fluidizing gas.

19. (Currently Amended) The plant as claimed in ~~any of claims 14 to 18, characterized in that~~ claim 14, wherein upstream of the fluidized-bed reactor, [(2)] a preheating stage is provided, which consists of a heat exchanger [(20)] and a separator [(14)].